

CLAIMS

- 1/ A method of manufacturing a coated part (2), in particular for a motor vehicle, the part being of the type comprising a structure (4) for injected plastics material coated in at least a first zone of its surface by a main coating (6) and in at least a second zone of its surface by a secondary coating (14), said second surface zone being surrounded on at least a fraction of its periphery by said first zone, the method being characterized in that it comprises the following steps:
 - cutting out a main blank (22) for the main coating (6) to a size greater than the area of said first zone, thereby providing a clamping margin (24);
 - cutting out a secondary blank (30) for the secondary coating (14) to a size and a shape corresponding substantially to said second zone;
 - securing the secondary blank (30) to the main blank (22) on an area of said main blank (22) that is to remain visible, in a location that corresponds to said second zone;
 - placing the assembly comprising the main blank (22) and the secondary blank (30) on a clamping frame (64) in a mold (52), which frame positions the clamping margin (24) of the main blank (22);
 - closing the mold (52), with the assembly comprising the main blank (22) and the secondary blank (30) being shaped during closure to take up the shape of the mold (52), at least in part;
 - overmolding the plastics material (4) onto the assembly comprising the main blank (22) and the secondary blank (30) on the side of the main blank (22) opposite from the secondary blank (30);
 - allowing the plastics material (4) to set, and unmolding the structure as a whole; and
 - cutting off the clamping margin (24) of the main blank (22).

- 2/ A method according to claim 1, characterized in that the secondary blank (30) is secured to the main blank by adhesive.
- 5 3/ A method according to claim 1 or claim 2, characterized in that the main blank (22) and the secondary blank (30) are stretched, at least in part, simultaneously during closure of the mold (52).
- 10 4/ A method according to any one of claims 1 to 3, characterized in that it further comprises the following steps:
 - positioning a strip (90) of plastics foam on the main blank (22) in a zone lying within said second zone;
 - 15 and
 - securing the secondary blank (30) to the visible surface of the main blank (22) so as to cover the foam strip (90) at least in part, and preferably completely.
- 20 5/ A method according to claim 4, characterized in that the foam strip (90) is secured to the main blank (22).
- 6/ A method according to claim 5, characterized in that the foam strip (90) is secured to the main blank by
25 adhesive.
- 7/ A method according to any one of claims 4 to 6, characterized in that the foam strip (90) is sandwiched between the main blank (22) and the secondary blank (30),
30 and in that the strip (90) is surrounded at least in part and preferably completely by a marginal region of the secondary blank (22).
- 8/ A method according to any preceding claim,
35 characterized in that the main blank (22) is held around its entire periphery in the clamping frame (64).

9/ A method according to any one of claims 1 to 7, for manufacturing a part that is partially coated in the main coating on one side, the method being characterized in that the main blank (22) is cut out to a shape whose outline on one side (92) corresponds to the boundary (84) between the main coating (6) and the non-coated portion (82), and in that the clamping margin (24) is provided on the other sides of the blank.

10/ A method according to claim 8 or claim 9, characterized in that the main blank (22) is substantially rectangular in shape.

11/ A method according to any preceding claim, characterized in that it further comprises the following steps:

- fixing the main blank (22) in a matrix (42) in a defined position;
- fixing the secondary blank (30) in a recess in a punch (46) for co-operating with a matrix (42), the recess being complementary in shape to the secondary blank (30) and being situated at a location that corresponds to the location of the secondary blank (30) on the main blank (22);
- applying the punch (46) against the matrix (42);
- and
- withdrawing the punch (46) and withdrawing the assembly comprising the main blank (22) and the secondary blank (30) from the matrix (42).

12/ A method according to any preceding claim, characterized in that a common reference system is used for all of the operations of positioning the parts relative to one another.

13/ A method according to any preceding claim, characterized in that a thermal protection sheet (31) for

the main blank (22) and for the secondary blank (30) is secured, in particular by adhesive, on the surface of the main blank (22) opposite from the secondary blank (30).

5 14/ A part manufactured by a method according to any one of claims 1 to 13, characterized in that the part includes a groove (18) formed in the coated surface, and in that the outline of the groove (18) corresponds
10 (14) and receives the edge (16) of said secondary coating, so as to hide it.

15 15/ A coated part according to claim 14, manufactured by a method according to claim 9 or any claim dependent thereon, the part being characterized in that it includes a groove (86) formed in the coated surface and receiving the free edge (92) of the main coating (22) so as to hide it.

20 16/ A coated part according to claim 14 or claim 15 manufactured using a method according to claim 13, characterized in that it includes a thermal protection sheet (31) for protecting the main blank (22) and the secondary blank (30), which sheet is fixed to the surface
25 of the main blank (22) opposite from the secondary blank (30).

30 17/ A coated part according to any one of claims 14 to 16, manufactured by a method according to claim 4 or any claim which depends thereon, the part being characterized in that it includes a strip (90) of plastics foam clamped between the main coating (6) and the secondary coating (14).

35 18/ A coated part according to any one of claims 14 to 17, characterized in that it forms an inside panel (2) for a motor vehicle door.

